

fringes being contiguous make one broad fringe composed of all the Colours in due order, the violet lying on the inside of the fringe next the shadow, the red on the outside furthest from the shadow, and the blue, green and yellow, in the middle. And, in like manner, the middlemost fringes of all the Colours lying in order, and being contiguous, make another broad fringe composed of all the Colours; and the outmost fringes of all the Colours lying in order, and being contiguous, make a third broad fringe composed of all the Colours. These are the three fringes of coloured Light with which the shadows of all Bodies are bordered in the second Observation.

When I made the foregoing Observations, I designed to repeat most of them with more care and exactness, and to make some new ones for determining the manner how the rays of Light are bent in their passage by Bodies for making the fringes of Colours with the dark lines between them. But I was then interrupted, and cannot now think of taking these things into further consideration. And since I have not finished this part of my Design, I shall conclude, with proposing only some Queries in order to a further search to be made by others.

*Query 1.* Do not Bodies act upon Light at a distance, and by their action bend its rays, and is not this action (*ceteris paribus*) strongest at the least distance?

*Qu. 2.* Do not the rays which differ in refrangibility differ also in flexibility, and are they not by their different inflexions separated from one another, so as after separation to make the Colours in the three fringes  
above

above described? And after what manner are they inflected to make those fringes?

*Qu. 3.* Are not the rays of Light in passing by the edges and sides of Bodies, bent several times backwards and forwards, with a motion like that of an Eel? And do not the three fringes of coloured Light above-mentioned, arise from three such bendings?

*Qu. 4.* Do not the rays of Light which fall upon Bodies, and are reflected or refracted, begin to bend before they arrive at the Bodies; and are they not reflected, refracted and inflected by one and the same Principle, acting variously in various circumstances?

*Qu. 5.* Do not Bodies and Light act mutually upon one another, that is to say, Bodies upon Light in emitting, reflecting, refracting and inflecting it, and Light upon Bodies for heating them, and putting their parts into a vibrating motion wherein heat consists?

*Qu. 6.* Do not black Bodies conceive heat more easily from Light than those of other Colours do, by reason that the Light falling on them is not reflected outwards, but enters the Bodies, and is often reflected and refracted within them, until it be stifled and lost?

*Qu. 7.* Is not the strength and vigor of the action between Light and sulphureous Bodies observed above, one reason why sulphureous Bodies take fire more readily, and burn more vehemently, than other Bodies do?

*Qu. 8.* Do not all fixt Bodies when heated beyond a certain degree, emit Light and shine, and is not this emission performed by the vibrating motions of their parts?

*Qu. 9.*